



# Model 3430-I I-Band Beacon Tracking Receiver

*A tracking receiver for antenna step tracking and automatic uplink power control*



The Model 3430-I is a fully frequency agile satellite receiver designed to provide a linear DC reference voltage proportional to the received signal level of a satellite beacon or narrow-band SCPC carrier. Frequency selection on 10 kHz steps may be accomplished from the front panel or remote control. Pre-detection noise bandwidth of 50 kHz facilitates accurate tracking at very low C/N levels.

## Model and Frequency Range Selection Table

<b>3430-I *</b>	4.5 to 4.8 GHz	<b>External BDC or LNB</b>	LNB for antenna Feed mounting
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\* Optional DC power available – Please contact factory for details.



*Reliable products for commercial and government satellite communications since 1980*

### Version 3 Firmware Features:

- RS-232 / RS-485 are both included and selected via front panel menu options.
- Available baud rates of 1200, 2400, 4800, 9600 and 19200 are selected via front panel menu options.
- Extended RS-485 addressing range of hexadecimal 01 - FF.
- Remote Port polling active in Local Mode.



**Satellite Systems** Corporation  
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# Model 3430-I

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The output of the Beacon Receiver is a DC voltage proportional to the input signal level to facilitate both tracking control and automatic power control. A Loss of Carrier indicator is provided in the event the tracking signal is lost. Form "C" relay contacts provide external Loss of Carrier Alarm. A front panel VFD displays operating frequency, relative signal level, carrier lock or alarm and input level.

### Specifications

Input Level .....	-55 to -90 dBm typical
Input Frequency .....	4.5 to 4.8 GHz
Tracking Slope .....	0.5 V/dB
Tracking Linearity .....	0.25 dB
Frequency Selection .....	10 kHz steps
Min. input level for Lock .....	-110 dBm
BTR Input Connector .....	Type "F" Female, 75 ohm
Threshold .....	4 dB C/N for acquisition < 1 dB C/N for carrier lock
Tracking Response .....	0 to +10 VDC over 20 dB input range
Alarms .....	Form-C relay contacts
AFC .....	±25 kHz
Noise Bandwidth .....	50 kHz

**EXTERNAL BDC OR LNB INCLUDED:**

Input Connector	
LNB .....	WR-229 Flange
BDC .....	Type "N" female
Output Connector .....	Type "F" female

**MECHANICAL:**

Output Connector .....	Modular socket & plug
Dimensions .....	1 RU, 19" x 16" x 1.75"

**POWER:**

Prime Input Power .....	90-260 VAC, 47-63 Hz, auto-sensing, 45 Watts max
Optional DC Power .....	Contact factory for availability
LNB Power .....	+24 Volts @ 1 Amp available on center conductor Selectable In/Out



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### Valid Options

#### Conversion Type

- Y LNB to be mounted at the Antenna with WR-229 flange.
- Z BDC with N input connector.

#### AFC and Filtering

- 0 Standard AFC and Standard 0.4 Hz output smoothing filter.
- A No AFC – Use for tracking Wide Data Carriers. Standard 0.4 Hz output smoothing filter.
- S No AFC and No 0.4 Hz output smoothing filter.
- T No 0.4 Hz output smoothing filter. Standard AFC.

#### Bandwidth

- 0 50 kHz pre-detection bandwidth.
- 5 25 kHz pre-detection bandwidth.

#### Input Connector on Rear of BTR

- 0 Standard input connector is type 75 ohm F-female.
- N 50 ohm N female connector.
- B 50 ohm BNC female connector.
- Q 50 ohm TNC female connector.

#### **Part Numbering**                      Typical part number 3430-IZ000

Base Model	Band	Conversion Type	AFC & Filtering	Band-width	Input Conn
3430	I	Y or Z	0, A, S, or T	0 or 5	0, N, B, or Q

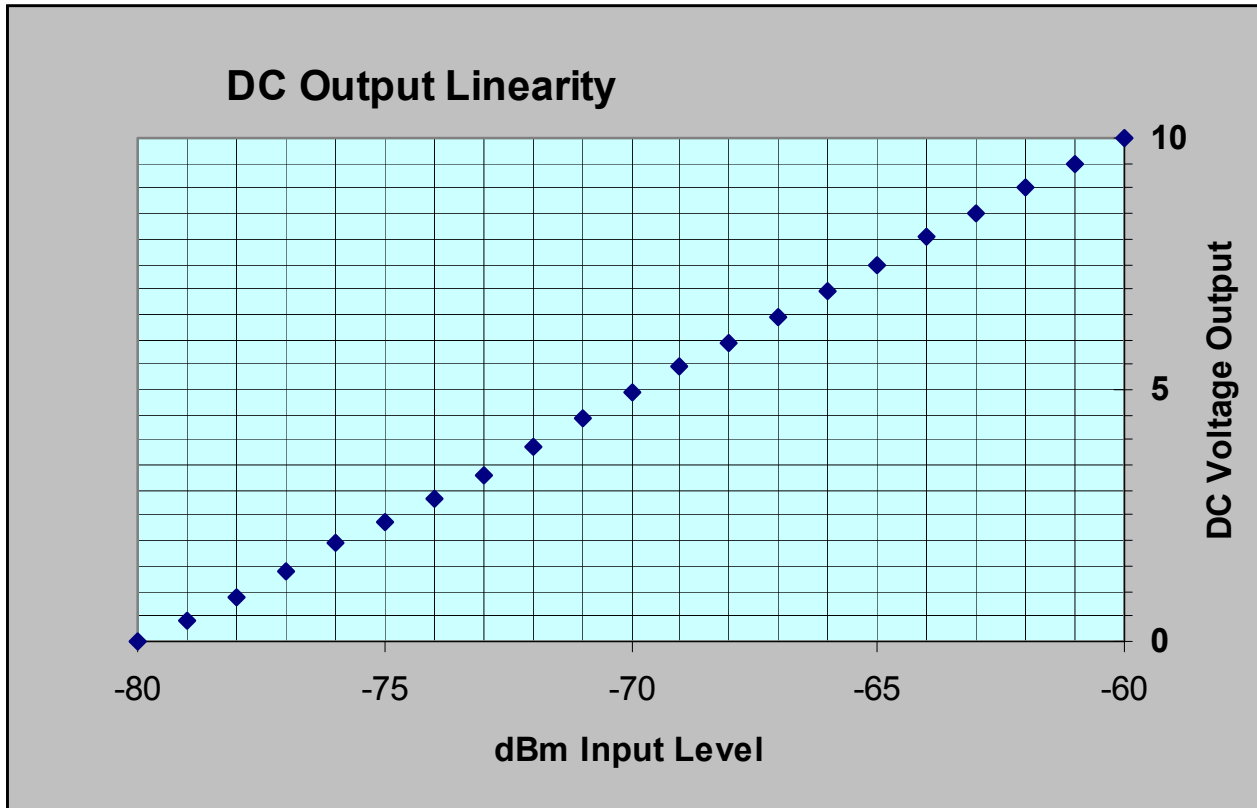
**Other Frequency Ranges are available.**

Please see <http://www.satsyscorp.com> for more information.



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